JUN 1 8 2003

SEQUENCE LISTING

ZHANG , HUANMIN AX, ROY L BELLIN, MARY E

85

ISOLATED POLYNUCLEOTIDE SEQUENCES ENCODING A FERTILITY ASSOCIATED ANTIGEN <130> 210707US20 <140> US 09/905,114 <141> 2001-07-16 <150> US 60/218,140 <151> 2000-07-14 <160> 11 <170> PatentIn version 3.1 <210> 1 <211> 592 <212> DNA <213> Bos sp. <220> <221> CDS <222> (1)..(591) <223> <400> 1 gag aag cta aac gga aat tca aga aaa ggc ata aca tac aac tat gtg Glu Lys Leu Asn Gly Asn Ser Arg Lys Gly Ile Thr Tyr Asn Tyr Val att agc tct cgc ctt gga aga aac aca tat aaa gaa cag tat gcc ttt 96 Ile Ser Ser Arg Leu Gly Arg Asn Thr Tyr Lys Glu Gln Tyr Ala Phe ctc tat aaa gaa aag cta gtg tct gta aaa caa agc tac ctc tac cac 144 Leu Tyr Lys Glu Lys Leu Val Ser Val Lys Gln Ser Tyr Leu Tyr His gac tat cag gct gga gac gca gat gtg ttt tcc agg gaa ccc ttt gtg 192 Asp Tyr Gln Ala Gly Asp Ala Asp Val Phe Ser Arg Glu Pro Phe Val 50 gtc tgg ttc cag tca ccc tac acc gct gtc aag gac ttc gtg att gtc 240 Val Trp Phe Gln Ser Pro Tyr Thr Ala Val Lys Asp Phe Val Ile Val 65 70 ccc ctg cac acc cct gag aca tcc gtt aga gag att gat gag ctg 288 Pro Leu His Thr Thr Pro Glu Thr Ser Val Arg Glu Ile Asp Glu Leu

gct gat gtc tac aca gat gtg aaa cgt cgc tgg aat gca gag aat ttc

Ala Asp Val Tyr Thr Asp Val Lys Arg Arg Trp Asn Ala Glu Asn Phe

95

336

				100					105					110		-	
			_		_	ttc Phe		_		_	-		_		_	_	384
	-		_			cgc Arg	_		_	_		_		_		_	432
			_			gac Asp 150		_	_	_	_	_			_	_	480
		_				ctt Leu	_					_					528
						gtc Val		_		_		_			_		576
	_	_	_	gcc Ala	_	g											592
	<210 <211 <212 <213	.> 1 !> E	2 L97 PRT Bos	sp.													
<400> 2																	
	Glu 1	Lys	Leu	Asn	Gly 5	Asn	Ser	Arg	Lys	Gly 10	Ile	Thr	Tyr	Asn	Tyr 15	Val	
	Ile	Ser	Ser	Arg 20	Leu	Gly	Arg	Asn	Thr 25	Tyr	Lys	Glu	Gln	Tyr 30	Ala	Phe	
	Leu	Tyr	Lys 35	Glu	Lys	Leu	Val	Ser 40	Val	Lys	Gln	Ser	Tyr 45	Leu	Tyr	His	
	Asp	Tyr 50	Gln	Ala	Gly	Asp	Ala 55	Asp	Val	Phe	Ser	Arg 60	Glu	Pro	Phe	Val	

Pro Leu His Thr Thr Pro Glu Thr Ser Val Arg Glu Ile Asp Glu Leu 85 90 95

Ala Asp Val Tyr Thr Asp Val Lys Arg Arg Trp Asn Ala Glu Asn Phe
100 105 110

Ile Phe Met Gly Asp Phe Asn Ala Gly Cys Ser Tyr Val Pro Lys Lys
115 120 125

Ala Trp Lys Asp Ile Arg Leu Arg Thr Asp Pro Lys Phe Val Trp Leu 130 135 140

Ile Gly Asp Gln Glu Asp Thr Thr Val Lys Lys Ser Thr Asn Cys Ala 145 150 155 160

Tyr Asp Arg Ile Val Leu Arg Gly Gln Asn Ile Val Asn Ser Gly Gly
165 170 175

Pro Gln Ser Asn Leu Val Phe Asp Phe Gln Lys Ala Tyr Arg Leu Ser 180 185 190

Glu Ser Lys Ala Leu 195

<210> 3

<211> 671

<212> DNA

<213> Bos sp.

J.

<400> 3

acaacaggat ctgccccata ctgatggaga agctaaacgg aaattcaaga aaaggcataa 60 catacaacta tgtgattagc tctcgccttg gaagaaacac atataaagaa cagtatgcct 120 ttctctataa agaaaagcta gtgtctgtaa aacaaagcta cctctaccac gactatcagg 180 ctggagacgc agatgtgttt tccagggaac cctttgtggt ctggttccag tcaccctaca 240 ccgctgtcaa ggacttcgtg attgtccccc tgcacaccac ccctgagaca tccgttagag 300 agattgatga gctggctgat gtctacacag atgtgaaacg tcgctggaat gcagagaatt 360 tcattttcat gggtgacttc aatgctggct gcagctacgt ccccaagaag gcctggaagg 420 acateegeet gaggaeggae eccaagtteg tttggetgat eggggaecaa gaggaeacea 480 cggtcaagaa gagcacaaac tgcgcctatg acaggatcgt gcttagagga caaaatattg 540 tcaactctgg tggtcctcaa tcaaacctcg tctttgattt ccagaaagct tacaggttgt 600 ctgaatcgaa ggccctggat gtcagcgacc actttccagt tcatcatcat catcatcatg 660

	aagaac	catg a	671									
	<211> <212>											
	<220> <223>	SYNTHETIC DNA										
	<400> 4 cgtgaggagc ttcggcgaga g											
)	<220> <221> <222>	26										
	<222>	MISC_FEATURE (4)(4) Xaa is any amino acid										
	<400>	5										
	Leu Lys	s Ile Xaa Ser Phe Asn Val Arg Ser Phe Gly Glu Ser Lys 5 10 15										
	Ala Gly	y Phe Asn Ala Met Arg Val Ile Val 20 25										
	<210><211><211><212><213>	6 26 DNA ARTIFICIAL SEQUENCE										
	<220> <223>	SYNTHETIC DNA										
	<400> acaacag	6 ggat ctgccccata ctgatg	26									
	<210><211><212>	7 25 DNA										

<213>	ARTIFICIAL SEQUENCE	
<220>	•	
<223>	SYNTHETIC DNA	
<400>	7	
	ggaa agtggtcgct gacat	25
<210>	8	
<211>	27	
<212>	DNA	
<213>	ARTIFICIAL SEQUENCE	
<220>		
<223>	SYNTHETIC DNA	
<400>	8	27
acaaca	ggat ctgccccata ctgatgg	27
<210>	9	
<211>		
<212>		
<213>	ARTIFICIAL SEQUENCE	
<220>		
<223>	SYNTHETIC DNA	
<400>	9	
	ttot toatgatgat gatgatgatg aactggaaag tggtogotga catocag	57
, 33		
010	10	
<210> <211>	10 22	
<211>		
<213>		
<220>	CVNIMILEMIC DNA	
<223>	SYNTHETIC DNA	
<400>	10	
ggccac	gcgt cgactagtac tt	22
<210>	11	
<211>	7	
<212>	PRT	
<213>	ARTIFICIAL SEQUENCE	
<220>		
<223>	SYNTHETIC PEPTIDE	
= * • •		
<400>	11	
Met Cl	ı Lys Leu Asn His His	
1	5	